



IP8540

IP Phone for Microsoft OCS 2007

User Guide

This document provides information about IP8540 IP Phone.

You can download all required documents at www.lg-nortel.com.

* IP8540 needs Microsoft OCS (Office Communications Server) 2007 for proper operation.



Regulatory and Compliance statements

This section provides required regulator, safety and disclaimer statements.

1. Radio Frequency Emissions:

FCC Compliance statement:

This device complies with Part 15 rules. Operation is subject to the following two conditions;

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

This Equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
 - Increase the separation between the equipment and the receiver.
 - Connect the equipment into an outlet on a different circuit from that to which the receiver is connected
- If problems persist, consult the dealer or an experienced radio/TV technician for help.

Canada Compliance statement:

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

This device complies with Class B Limits of Industry Canada. Operation is subject to the following two conditions;

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

European Union Declarations of Conformity:

LG-Nortel Co. Ltd. declares that the equipment specified in this document, which bears the "CE" mark, conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (R&TTE 1999/5/EC) including,

- Electromagnetic Compatibility Directive (89/336/EEC) and
- Low Voltage Directive (73/23/EEC)

Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative.

The product fulfills the essential requirements of the harmonized standards shown above. This product also complies with the following standards:

- EN 55022 Class B
- AS/NZ 3548 Class B
- EN 55024
- EN 50082-1
- EN 61000-3-2
- EN 61000-3-3

2. Product Safety Instructions

This product complies with and conforms to the following international Product Safety standards as applicable:

- Safety of Information Technology Equipment, IEC 6095-1, including
- Relevant national deviations as listed in Compliance with IEC for Electrical Equipment (IECEE)
- Safety of Information Technology Equipment, CAN/CSA-C22.2 No. 60950-1/UL 60950-1

3. E-911 and use of the IP8540 with Multi-Line Telephone Systems:

Please note the use and operation of this phone as part of a multi-line telephone system (MLTS) may be subject to state and/or federal E-911 MLTS laws that require the MLTS to provide a caller's telephone number, extension, and physical location to applicable state and/or local emergency services when a caller initiates a 911 call. This phone does not provide a caller's telephone number, extension, or physical location information to emergency services when a caller dials 911, and compliance with state and/or federal E-911 MLTS laws is the sole responsibility of the purchaser of this phone.

4. Privacy:

IP8540 implements several security and encryption technologies however, privacy of communications may not be ensured when using this telephone.

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Revision History

REVISION	DATE OF ISSUE	REMARKS
1.00	2007-11-02	Initial Release
2.00	2009-02-09	Format change Added information about new features released with Office Communication Server 2007 R2

Important Safety Instructions

When using this product, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following;

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this product near water, for example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
5. Do not place this product on an unstable stand, or table. The product may fall, causing serious damage to the product.
6. This product should be operated only from the type of power source indicated on the product label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
7. Do not allow anything to rest on the power cord. Do not locate this product where the cord might be damaged by people walking on it.
8. Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
9. Never spill liquid of any kind on the product.
10. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified person when some service or repair work is required. Opening or removing covers may expose you to dangerous voltages or other risk. Incorrect reassemble can cause electric shock when the appliance is subsequently used.
11. Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power supply cord or plug is damaged.
 - b. If liquid has been spilled into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
 - e. If the product has been dropped or damaged.
 - f. If the product exhibits a distinct change in performance.
12. Avoid using your device during an electrical storm. There may be a remote risk of electric shock from lightning.
13. Do not use your device to report a gas leak in vicinity of the leak.
14. Severe damage to your device will occur if this set is plugged into an ISDN connection.
15. Consult your system administrator to ensure that you are plugging your set into a 10/100 BaseT Ethernet jack.

Precaution

- Keep this product away from heating appliances and electrical noise generating device such as fluorescent lamps, motors and television. These noise sources can interfere with the performance.
- This product should be kept free of dust, moisture, high temperature (more than 40°C) and vibration, and should not be exposed to direct sunlight.
- Never attempt to insert wires, pins, etc. into the product. If the product does not operate properly, it should be repaired by an authorized service center.
- Do not use benzene, thinner, or the like, or any abrasive powder to clean the product. Wipe it with a soft cloth.

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1. Introducing LG-Nortel IP8540 IP Phone

1.1 Overview

IP8540 is a powerful communications tool for enterprises with Microsoft Office Communications Server 2007. IP8540 links the power of Office Communications Server 2007 to the high reliability of a dedicated desk phone. IP8540 employs an embedded version of Office Communicator 2007 ("Office Communication 2007 Phone Edition") as the client with access to contacts stored locally and in Office Communications Server 2007. The large full color touch screen graphically presents context sensitive call controls, contact lists and status. A simple tap of the screen yields fingertip control of communications, place calls from contact lists, transfer calls to others and conference multiple calls.

- Wideband real-time codec technology delivers high fidelity audio from the handset and full duplex speakerphone.
- For higher security installations, IP8540 supports both PIN (Personal Identification Number) and advanced biometric fingerprint reader.
- Keep a record of all phone conversations in Outlook.

With Microsoft Office Communications Server 2007 R2 upgrade (S/W version 3.5.6907.0), following new features are also available:

- **Improved user experience.** The user interface has been enhanced to provide a better look-and-feel. The soft input panel (SIP) has been enlarged to enable easier entry of credentials on the Sign-in page.
- **Voice Mail indicator.** A "Message Waiting" indicator is now shown when a voicemail has been recorded. The list of voicemails is also displayed in the Messages view, showing who left the message, their presence status, and the date and time that the message was recorded. (This feature requires Exchange 2007.)
- **Call Log view.** The Call Log view has also been implemented, showing the list placed, received, and missed calls (This feature requires Exchange 2007).
- **Configure Finger Print to unlock.** Users can choose to configure a PIN or a fingerprint to unlock the phone.
- **Wideband audio quality.** Audio quality has been improved significantly by the addition of wideband RTAudio for peer-to-peer VoIP calls. Multiparty and PSTN calls now use the SIREN codec to the A/V MCU or Mediation server. In addition, significant work has been done to improve echo cancellation.
- **External access.** External access is now supported. Users can now take the device home and make calls from and receive calls to their SIP URI or work phone number.
- **Search Outlook contacts on the device.** The Search feature on the phone now displays not only your corporate address book contacts but also personal contacts that you have stored in Outlook. Users can call Outlook contacts from phone with a single touch.
- **Improved login scenarios.** Login resiliency and auto sign-in during failures have been improved in this version.

- **Improved scrolling experience.** Users can quickly scan and find a contact to call by using the improved and accelerated scroll wheel on the device. The new scroll wheel and improved driver provide a richer experience and reduce the time required to search for a particular contact.
- **Reset to factory defaults.** Users can now reset the device like any other Mobile device to factory defaults by using small pin on back of device, between the headset and USB interfaces.
- **Volume settings.** The device displays the existing volume level as a user increases or decreases the volume. Users can change the volume of handset or speaker during the call.
- **Change/forgot PIN.** Users can change the PIN that they use to unlock the phone. The Forgot PIN functionality has been introduced to enable users who have forgotten their PIN to unlock the device using their password.
- **Update password.** Users can update their password on the device after they have changed it on the PC. Note that server will only authenticate the new password when its current security association (SA) has expired, so use of this setting is not recommended in this release.

1.2 Device Layout

The IP8540 uses a touch screen to select contacts and configure settings, a scroll-wheel to navigate the user interface, and a standard keypad for entering phone numbers.

Figure 1 below describes the key elements of the IP8540.

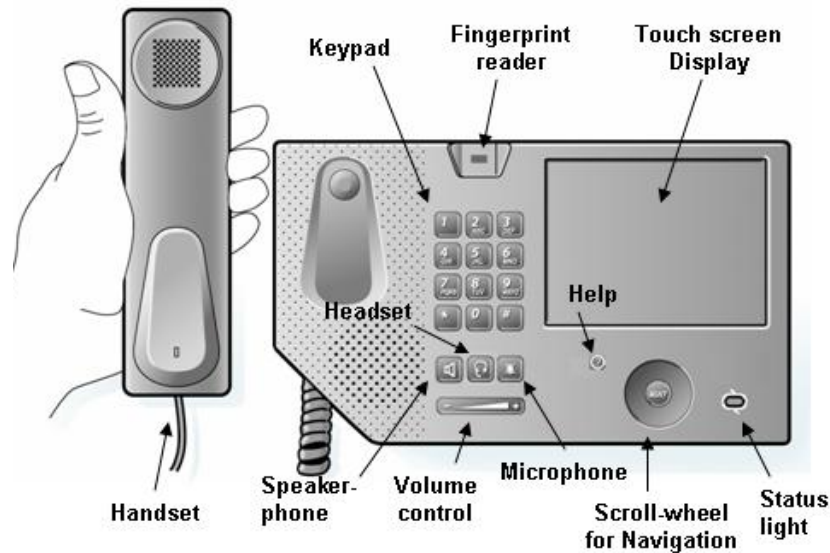


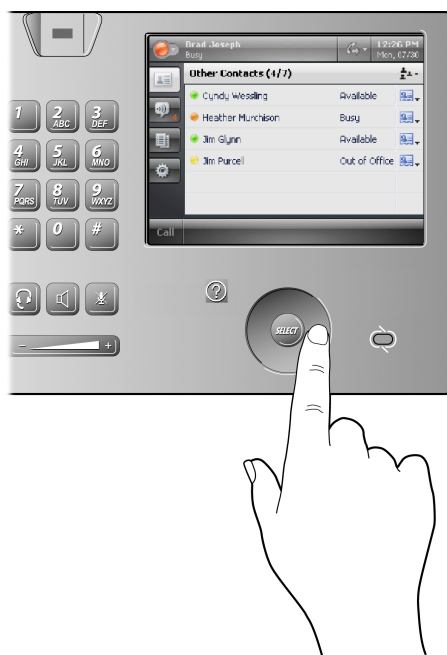








Figure 1: Key elements of the IP8540

- **Liquid crystal display (LCD) touch screen:** Touch screen for entering commands and selecting contacts
- **Keypad:** Standard phone keypad for entering phone numbers

- **Light-emitting diode (LED) status lights** : Indicates user presence information (Green indicates “Available”, Amber indicates “Away”, Green & Amber indicates “Inactive”, and Red indicates “Busy” or “Active Call”)
- **Scroll-wheel** : Navigates up and down the contact list and other elements of the user interface.



- **Volume up/down button** : Increases and decreases the volume for the ringer, handset, and loudspeaker.
- **Mute microphone** : Disable or enable audio input
- **Speakerphone button** : Activate or deactivate speakerphone
- **Headset button** : Activate or deactivate headset audio
- **Finger reader** : Allows you to log on to your IP8540 with the touch of your finger
- **Help** : Displays context sensitive help

2. Getting your IP8540 up and running

2.1 What's in the box

The IP8540 product package contains the items as shown in Figure 2.

- IP8540
- Phone handset
- Handset Coiled-cord
- 1.8 m (6-foot) RJ-45 Ethernet cable
- Quick Guide / User information booklet / Tilting leaflet / Registration card

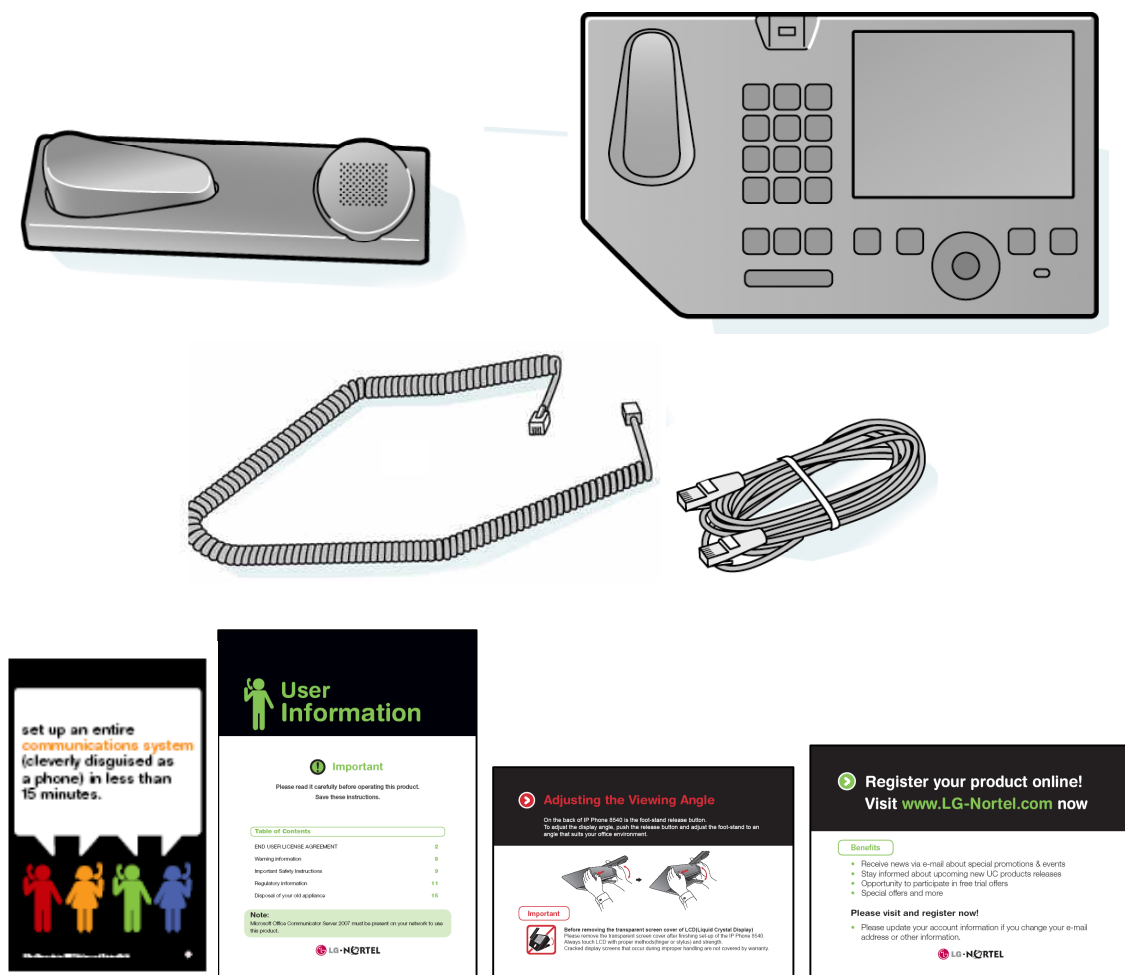


Figure 2: Contents of IP8540 product package

2.2 AC/DC power adaptor

The IP8540 ships without an AC/DC power adaptor. The IP8540 LAN Ethernet port supports IEEE802.3af PoE (Power-over-Ethernet), so an external power supply is not needed if your Ethernet switch supports PoE class 3. If the installation requires an AC/DC power adaptor, select the adaptor for your region from the table below.

Order Part Number	Model Number	Applicable Region
TKTN9010201	PLA12R-120(ASK)-R USA	USA, Canada, Mexico
TKTN9010601	PLA12R-120(ASK-E)-R EUA	Europe
TKTN9010701	PLA12R-120(ASK-K)-R GBR	United Kingdom
TKTN9010801	PLA12R-120(ASK-S)-R AUS	Australia
TKTN9010901	PLA12R-120(ASK-C)-R CHN	China
TKTN9011001	PLA12R-120(ASK-H)-R KDX	South Korea

2.3 Optional accessory for wall-mount installation

The IP8540 optionally can be wall mounted; you may wish to order the following part number to ensure secure placement of the handset when phone is wall mounted:

Order Part Number	Part Name
TKTN9013701	Handset Holder for Wall Mount

2.4 Set-up

Before connecting your new phone, take a moment to consider safety and reliability. Use common sense when locating, connecting and using your IP8540.

- Locate the phone on a dry level surface. Keep the phone away from the edges of the surface to avoid the phone falling off the edge.
- Locate cables to avoid damage. For example, do not locate under rugs or carpet. Also, do not locate cables between the desktop and walls where they may be crushed, damaging the insulation.
- Check the cables regularly and, if damage is noted, disconnect the phone. Contact your local representative for a replacement.
- Should liquid spill on the Phone, disconnect the unit from power and the network.
- Do not use during lightning storms. Lightning presents a rare but potential lethal shock hazard.
- Clean IP8540 with a soft dry cloth; do not use liquid cleaners or sprays.
- Only attach peripherals specified by LG-Nortel.
- Always use caution when connecting to AC power. Use only with a properly grounded standard AC power outlet and the AC/DC adaptor for the unit.

2.5 Wall Mounting

The foot of IP8540 incorporates slotted wall mount holes. To wall mount IP8540 you will need to install two mounting screws arranged to fit in the mounting slots. #6 pan head screws are recommended and should be anchored firmly into a wall stud or wall anchor. Tighten the screw leaving about 1.5 mm (1/16th inch) of exposed screw to allow for the plastic thickness. Slide the hole in the foot over the head of the screws then slide the unit down the wall. If the unit does not slide down over the screws, loosen the screws slightly. If the unit is loose on the wall, remove the unit and slightly tighten the screws. The adjacent figure gives center-to-center mounting dimensions.

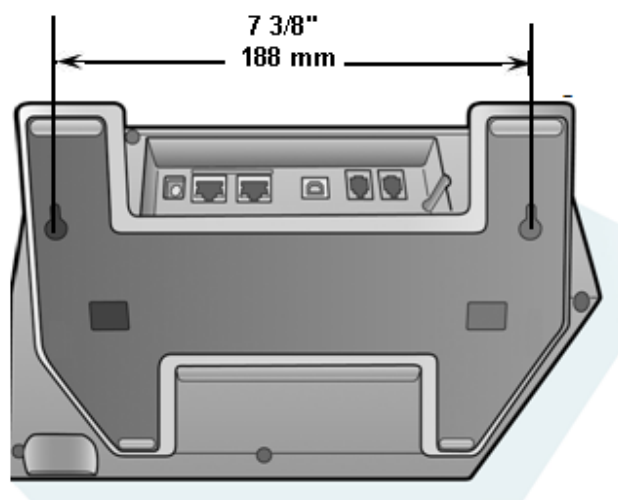


Figure 3: Wall mount dimensions

There also is a handset holder that clips onto the phone (as shown below) to secure the handset when phone is mounted to a wall (refer to previous section for part number to order).

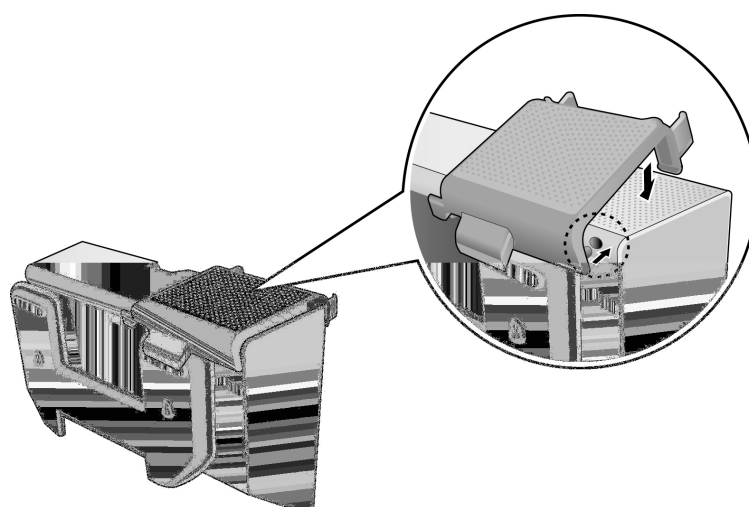


Figure 4: Handset-holder for wall mount installation

2.6 Adjusting the Viewing Angle

On the back of IP8540 is the foot-stand release button. To adjust the display angle, push the release button and adjust the foot-stand to provide the best view of the touch screen.

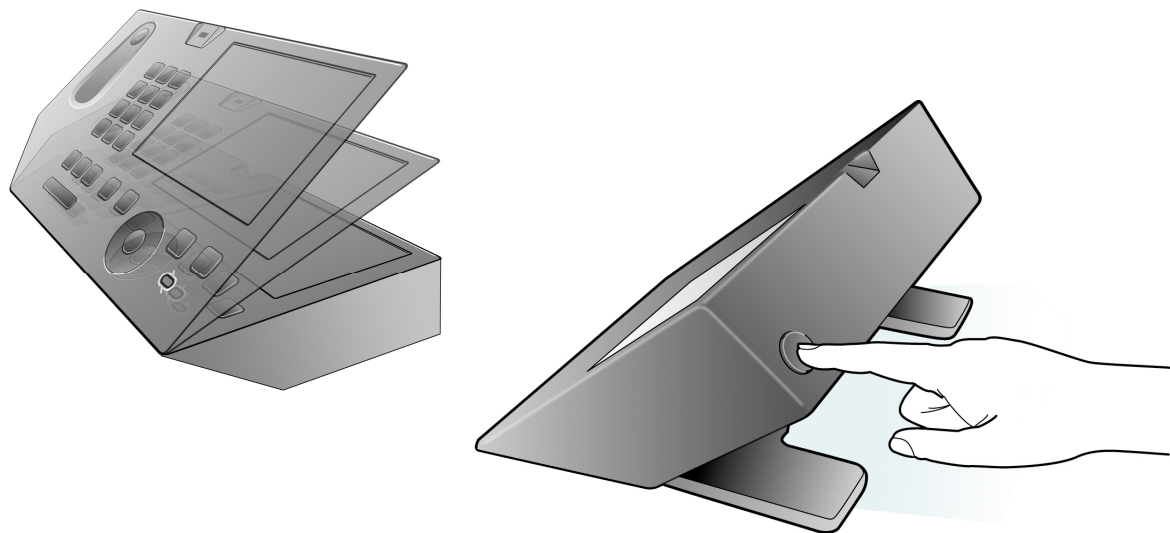


Figure 5: Viewing angle control

2.7 Connections to IP8540

The IP8540 incorporates several standard connectors to interface to your LAN, power, and peripherals. Note the LAN must have a local DHCP (Dynamic Host Control Protocol) server to provide an IP address and other information to the phone. The connectors are grouped in the wiring cavity as shown in the Figure.

To install the IP8540: ①

- Connect the coiled cord to the handset and RJ-9 connector ⑥.
- Connect the Ethernet cable to RJ-45 connector ② and your Ethernet switch.
- Connect the AC/DC power adaptor to DC input connector ① and a standard AC power outlet. If your LAN equipment is compliant with the Power-over-Ethernet (PoE) standard, then use of the AC/DC adaptor is optional.

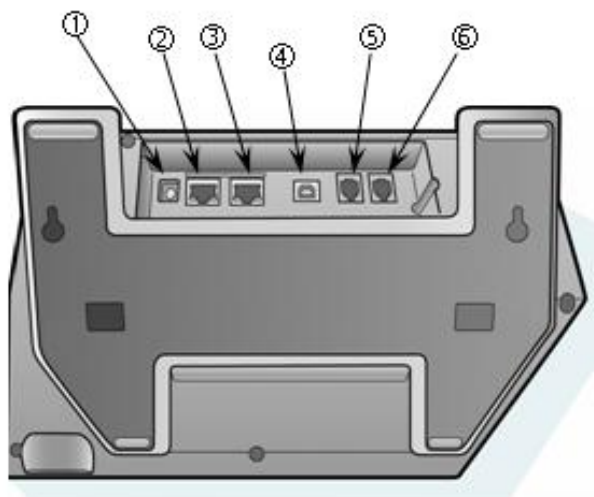


Figure 6: IP8540 rear view

Optional connections and their intended uses are:

- RJ-9 connector ⑥ (Connection to a headset with RJ-9 plug)
- Type-B USB connector ④ (Connection to a USB host connector on PC)
- RJ-45 connector ③ (Connection to Ethernet port on local PC; This allows IP8540 and PC to share a single LAN termination.)

*** There is a Type-A USB port on the side of the wiring cavity. This USB port is reserved for future use.

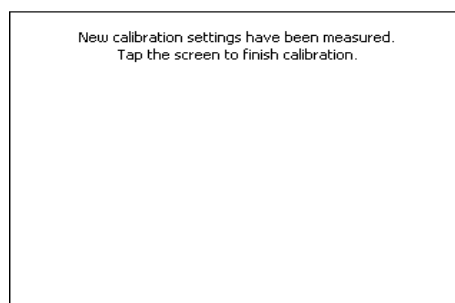
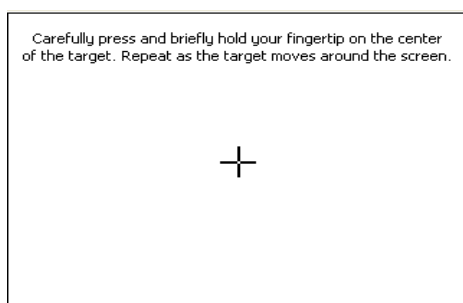
2.8 Initial Power up and Sign In

The first time you power up IP8540, you will need to do the following:

- Calibrate the touch screen
- Sign In (with IP8540 or with Office Communicator 2007 R2 on your PC)
- Set the phone unlock parameters
- Set the time zone

2.8.1 Calibrating the touch screen

You must calibrate the touch screen during the initial power up. After initializing, the IP Phone displays calibration instructions. Follow the on-screen instructions to calibrate the touch screen.



2.8.2 Sign In with IP8540

After completing calibration, the Sign In screen appears. Once entered, your sign-in details are stored for subsequent sign-in. To sign-in you must enter the following:

- Sign in address
- Domain\user name
- Password



This information is available from your Windows Office Communications Server 2007 administrator.

1. Use the virtual keyboard to enter each of the items in the respective text box.
2. Tap **Sign In**, in the lower-left of screen.

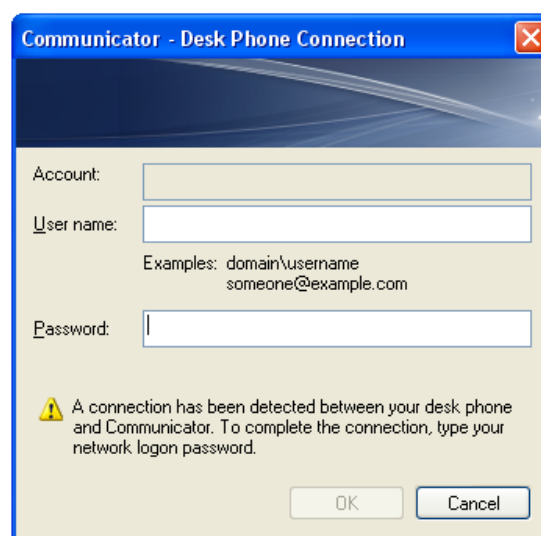
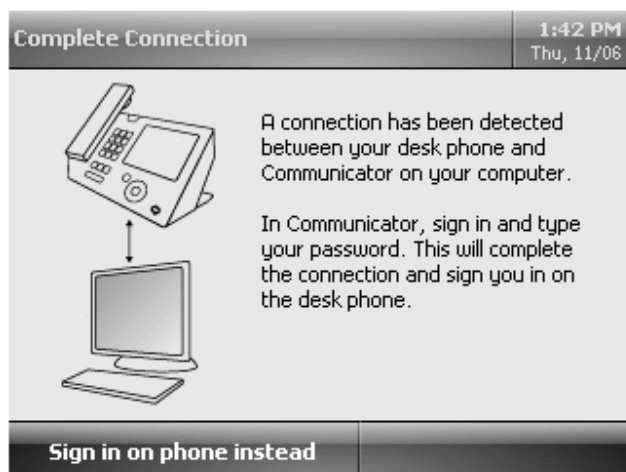
*** For numeric entries, tap the numeric button, **123**, in the lower left of the virtual keyboard.

2.8.3 Sign In with Office Communicator 2007 R2 on your PC

After completing calibration, the Sign In screen appears. You can connect IP8540 (with S/W version 3.5.6907.0) to your computer using an USB cable for automatic single-sign in using Office Communicator 2007 R2.

To sign in to your IP8540 using Office Communicator 2007 R2, do the following:

- Sign into Office Communicator 2007 R2 from your computer.
- Using the USB cable, connect the Type-B USB connector (smaller cable end connector) to the backside of your IP8540.
- Connect the Type-A connector (larger cable end connector) to your computer.
- When both ends of the cable are secured, the connection between Office Communicator 2007 R2 and your IP8540 is detected and you are prompted to enter your Account, User name, and Password from Office Communicator 2007 R2.



- Enter account information using Office Communicator 2007 R2.

After you have entered your credentials, IP8540 is ready for signing in.

To sign in using Office Communicator 2007 R2, do the following:

- Tap **Advanced**.



- Tap **Sign in via PC**.
- Sign on using Office Communicator 2007 R2.

2.8.4 Setting your unlock parameters

For security, you can lock the IP8540 when leaving your desk. When locked, the display shows the blank screen with “Unlock” soft key on lower left corner. (IP8540 can place and receive calls while locked using keypad, but contact list access and other controls are disabled.)



IP8540 unlocks by entering a PIN (Personal identification Number) or using the biometric fingerprint reader.

After you complete sign-in, the PIN creation screen appears. You can select and set the unlock method (PIN or fingerprint) and create a PIN or fingerprint scan.

To select and set the unlock method, do one of the following:

- Create a PIN by typing and retyping a 6-digit PIN.



Or,

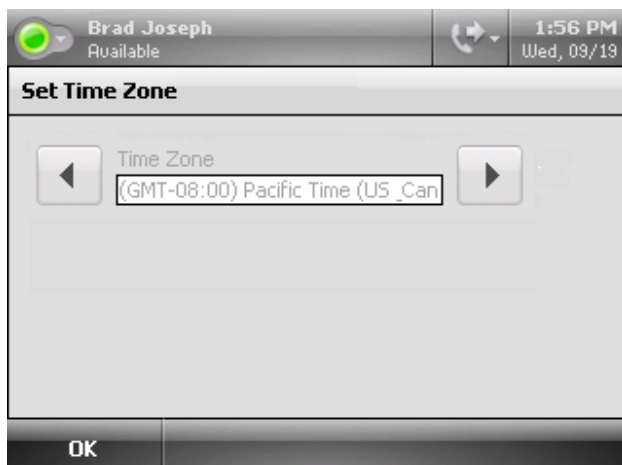
- Enter a fingerprint scan by tapping **Use Fingerprint Instead**.
- Swipe you fingertip until four readings are measured.



2.8.5 Set Time Zone

You set your time zone upon first sign-in. To change the time zone settings, do the following:

- Tap  and  as needed to adjust the time zone.



- Tap **OK**.

IP8540 displays the main screen and is ready for use.

3. Using your IP8540

3.1 Understanding the touch screen

Before you begin use of your IP8540, take a moment to familiarize yourself with the overall screen layout. As shown in the Figure 7, the screen is divided into four (4) major sections:

- Presence & Info bar – The Presence & Info bar at the top of the screen displays your presence, name, Call forward control icon, and the date and time.
- Window controls – The Window control section on the left side of the screen includes icons to select the active window (Contacts, Messages, Call Logs, Settings, or Help).
- Main Window – The Main Window displays the selected window and active call information.
- Control bar – The Control bar at the bottom of the screen displays context sensitive controls for the IP8540 and call control buttons (Transfer, conference, etc.).



Figure 7: IP8540 screen layout

3.2 Controlling Presence (Phone Status)

Your IP8540 sends updated status information to Office Communications Server at regular intervals or when the status changes. There may be times when you want to change your presence status. For example, if you need to concentrate on a report, you may change your status to Do Not Disturb to avoid interruptions.







- At the top of the screen, tap the presence color to the left of your name.



- Tap your presence status.



The following table describes each presence indicator and the accompanying status text.

Icon	Status Text	Description
	Available	The contact is online and can participate in conversations. The user can set this presence level manually.
	Busy	The contact is online but engaged in another call. The user can set this presence level manually.
	Be Right Back	This contact is engaged in another activity and will return shortly.
	Away	The contact is probably not available. This status is displayed for the following reasons: <ul style="list-style-type: none"> • The IP8540 has been idle for more than the inactive period - 15 minutes by default. • The Office Outlook calendar or Out of Office Assistant for the contact indicates an out of office state • The contact has manually set the presence status to Away.
	Do Not Disturb	The contact is online but does not want to be interrupted. This status displays when set manually by the user.
	Reset Status	Resets status to the default based on Communicator status.

3.3 Contact List

From the contact list you can view contact information, search for a contact in a group and call a contact. The status information in the contact list displays the availability of the contact. Icons indicate presence to the left of the contact's name, and by text to the right. You can adjust the status of your IP8540. Refer to

In the contact list, you can view the following information for each contact:

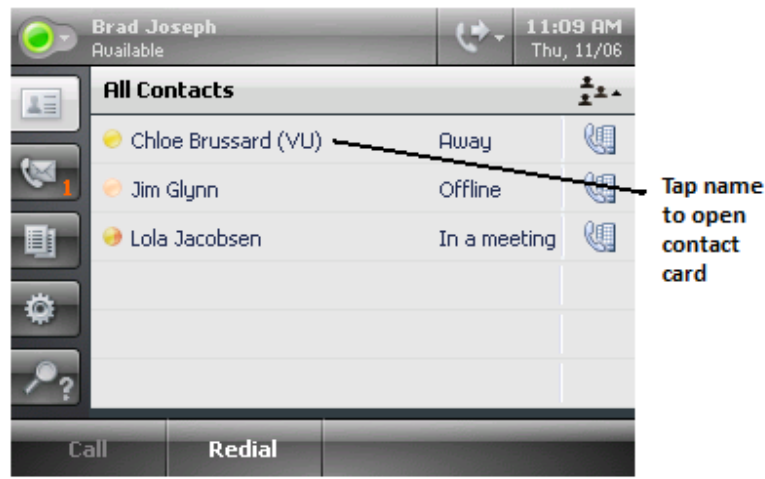
- Contact's presence,
- Contact's name, and
- Contact card, which contains additional details about the contact.

3.3.1 Viewing a Contact Card

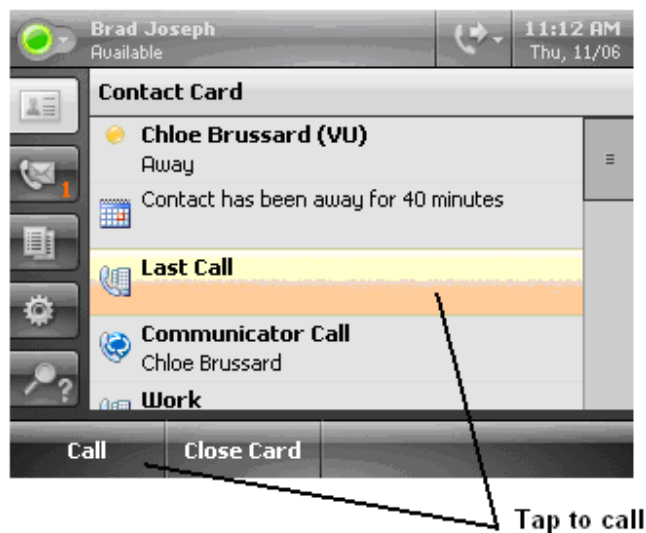
A contact card provides details about the contact's availability, activity and alternate phone numbers. Depending on the level of access granted you by a contact, the card displays the contact's schedule, phone numbers, as well any note the contact has written.

To view a contact card:

- From the Contacts screen, tap the name of the contact.



- View the contact information.



- To place a call from the contact card, tap the phone number you would like to call, or tap the Call button.

(Note: The default phone number for all contacts is their work phone. For user's that are UC enabled, when their work phone number is dialed, their IP phone will ring as well.)

- When you are done viewing the Contact card, tap **Close Card**.

3.3.2 Searching the Contact list

You can search for a contact from the list using the dial pad. Each dial pad digit represents the three alphabet characters on the button, 2 for ABC, 3 for DEF, etc. As you input digits, the display shows contacts that match all three (3) characters of the digit.

To search the records

- With the dial pad, enter digits in the text box representing the letters in the contacts name. Matching contact names are displayed.


To dial a contact

- Tap the contact name or, use the scroll wheel to highlight the contact and tap **Call**.

3.3.3 Selecting a Contact Group

You can setup multiple contact lists or Contact Groups. You can select the Contact Group or all groups to display in the Contact window.

To view a Contact Group


- To the right of the Contacts box, tap the Contact Groups icon .
- Do one of the following:
 - a) To view a Contact Group, tap the group name.
 - b) To create a Contact Group, tap **New Group** and follow the on screen instructions.
 - c) To view all of your contacts, tap **All Contacts**.

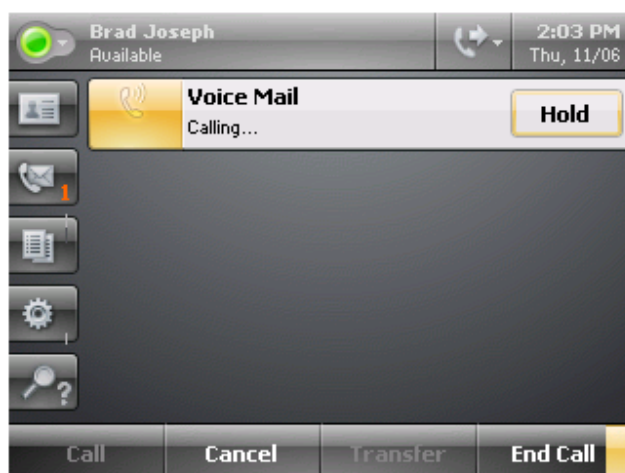
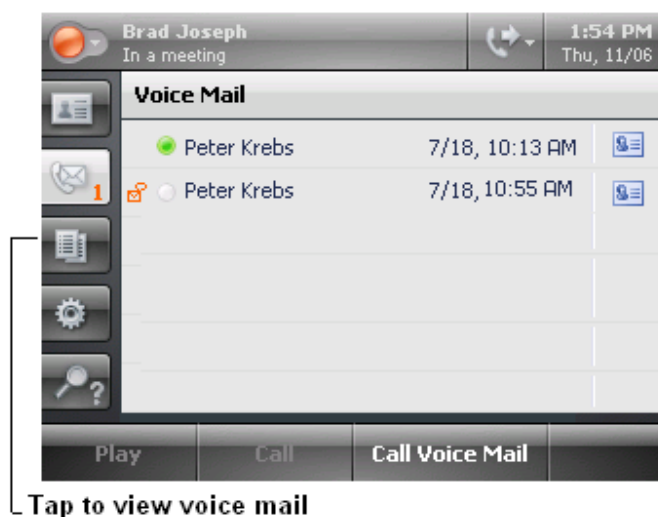


3.4 Message Waiting

In conjunction with Office Communications Server 2007, Exchange 2007 provides voice mail services. The Message window control icon indicates how many new voice mails are waiting. The Message window displays a list of voice mails, showing who left the message, their presence status, and the date and time of the recording. This feature requires Exchange 2007.

To access voice mail, do the following:

- On the right margin, tap the Voice Mail button .
 - In the list of voice mails, tap the desired voice mail.
- Or,
- Tap the **Call Voice Mail** button.



3.5 Call Logs





A log of your calls (missed, received, and placed) is available in the IP8540. Using IP8540, you may view and return calls from the Call Logs. IP8540 stores a maximum of 60 records in the log. You can manage the Call Logs from your desktop PC using Outlook.

To view the call log

- Tap the Call Log icon.



Tap to view call log

- Select one of the following Call Log views:
 - To view all calls that you have missed, received, or placed, tap the All calls icon .
 - To view calls that you have missed, tap the Missed calls icon .
 - To view calls that you have received, tap the Received calls icon .
 - To view calls that you have placed, tap the Placed calls icon .

To view the contact card for a contact in the Call Log

- Tap the contact card icon next to the contact name.
- When done viewing the contact card, tap **Close Card**.

To place a call from the call logs

- Tap **Call Log**.
- Select the log view (missed, received, or placed).
- Using the Scroll Wheel, locate the log item.

Tap the contact to place the call.

3.6 Settings

The Settings window allows you to configure settings for and view information about your IP8540. The Settings window has the following selections:

- Lock phone
- Volume
- Ring Tones (with S/W version 3.5.6907.0)
- Change PIN
- Change Fingerprint
- Update password
- Brightness
- Location/Time Zone
- Date and Time Format
- Switch User
- Calibrate Touch Screen
- Logging
- About (device information)
- Change Language (with S/W version 3.5.6907.0)



3.6.1 Locking your phone

For security, IP8540 has a lock feature. When locked, the display shows the unlock screen shown below.



To lock the phone

- Tap the Settings icon, .
- Tap **Lock Phone**






IP8540 Unlock screen displays and the phone locks.

To unlock IP8540

- Tap **Unlock** and follow the on-screen instructions.

3.6.2 Adjusting volume levels




To set volume levels

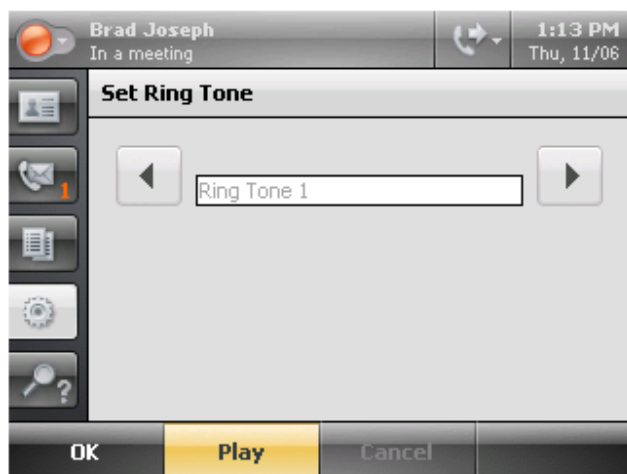
- Tap the Settings icon, .
- Tap **Volume**.
- Tap  and  to adjust volume levels for the ringer, handset, and speaker.
- Tap **OK**.



3.6.3 Ring tones


You can set one of four ring tones for you IP8540 (with S/W version 3.5.6907.0).
To configure ring tones, do the following:

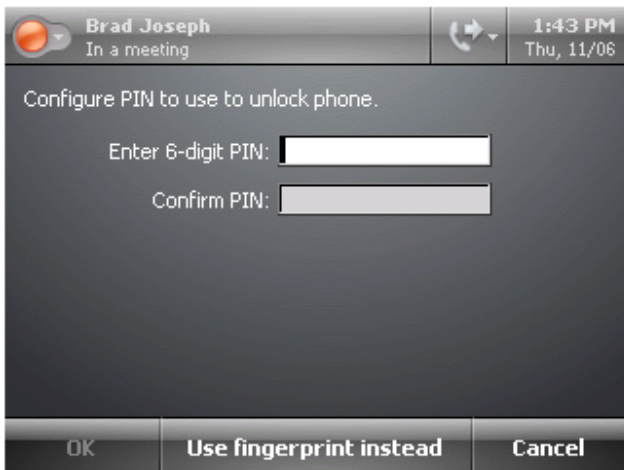
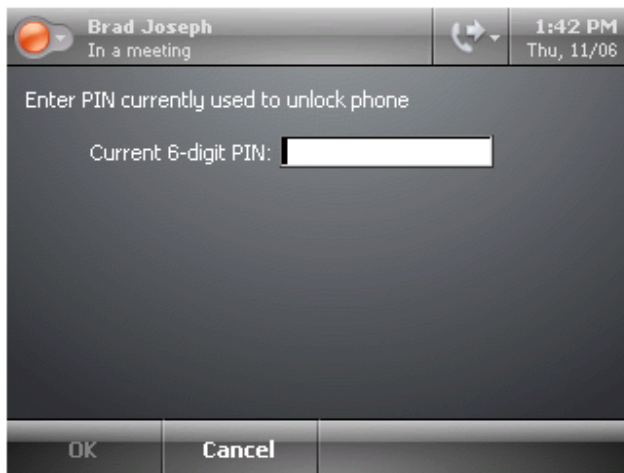
- Tap Settings. .
- Tap **Ring Tones**
- Tap  and  as needed to select a ring tone.
- Tap Play to hear the tone.
- When you have chosen a ring tone, tap OK.



3.6.4 Changing your PIN

To change your PIN,


- Tap the Settings icon, .
- Tap **Change PIN**.
- In the Current PIN box, use the keypad to enter your current PIN.
- In the New PIN and Confirm PIN boxes, enter your new PIN.



3.6.5 Changing fingerprint

You can change the fingerprint ID you use to unlock the device by resetting the Change Fingerprint ID setting. For example, it may be more convenient to use a finger from you left hand if your phone is to the left of your work area.

To change your Fingerprint ID, do the following:

- Tap the Settings icon, .
- Tap **Change Fingerprint**.
- Swipe the fingerprint reader with the finger you currently use unlock the phone.




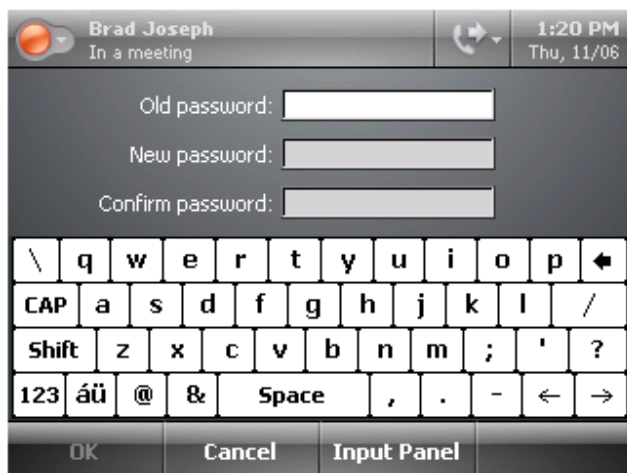
- Swipe a finger across the fingerprint reader until you have entered four successful readings.



3.6.6 Update your password




To change your password

- Tap the Settings icon, .
- Tap **Update Password**.
- Use the virtual keyboard to enter the old and new password information.
- Tap **OK**.



3.6.7 Adjusting the screen brightness




To set the brightness

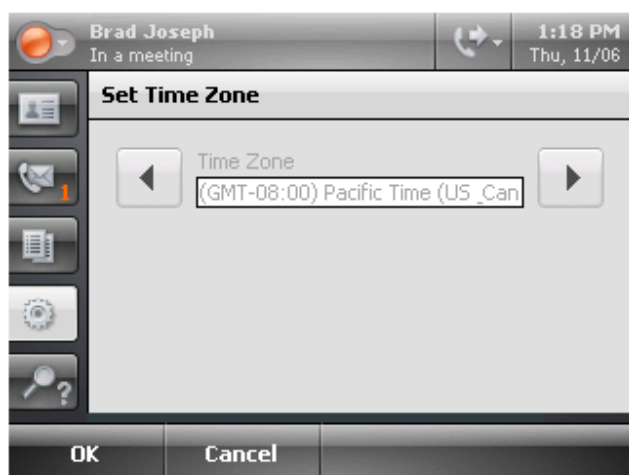
- Tap the Settings icon, .
- Tap **Brightness**.
- Tap  and  to adjust the brightness
- Tap **OK**.



3.6.8 Changing the Time Zone




To change location and time zone

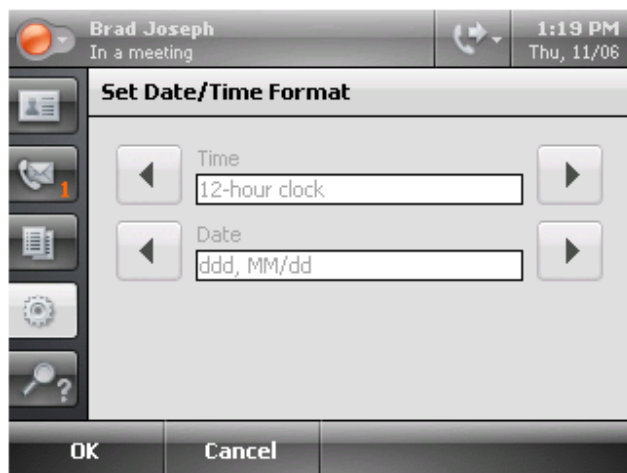
- Tap the Settings icon, .
- Tap **Set Time Zone**.
- Tap  and  to set the location and time zone.
- Tap **OK**.



3.6.9 Changing the date and time display format

To change the format of the date and time display


- Tap the Settings icon, .
- Tap **Date/Time Format**.
- Tap  and  to adjust the time and date formats.
- Tap **OK**.



3.6.10 Switching Users

Multiple users can use IP8540, but not concurrently. A user must sign out of the device before another user can sign in. In doing so, each user individually signs into the Microsoft Office Communications Server 2007. To switch users, the current user must sign out using the Switch User feature to allow another user to sign into the device. No past user information, such as sign-in addresses or passwords, are retained on the device.


To switch from one user to another:

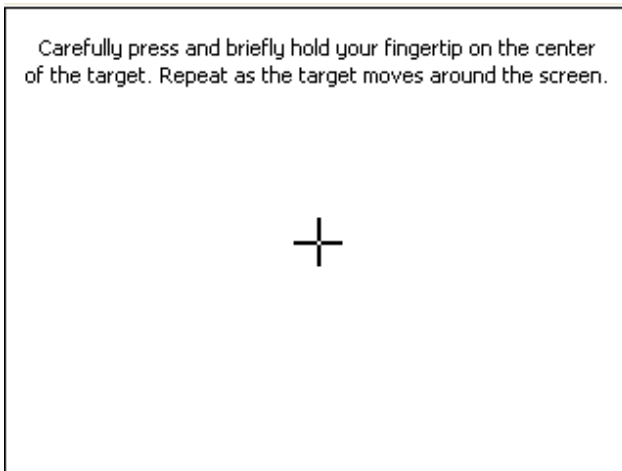
- Tap the Settings icon, .
- Tap **Switch User**.
- Use the virtual keyboard to enter the new user information.
- Tap **Sign In**.



3.6.11 Calibrating the touch screen

To calibrate the touch screen

- Tap the Settings icon, .
- Tap **Calibrate Touch Screen**.



- Use your fingertip to touch the on-screen target until the new calibration is established.
- When the calibration is set, tap the screen a final time to finish the calibration.

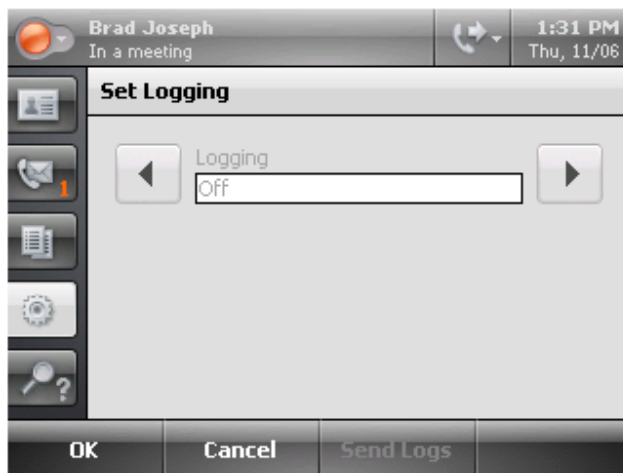


3.6.12 To set logging

For tracking purposes, IP8540 can upload its activity logs to the Office Communications Server 2007 Update Service. This is helpful for problem evaluation.

To enable logging, do the following:

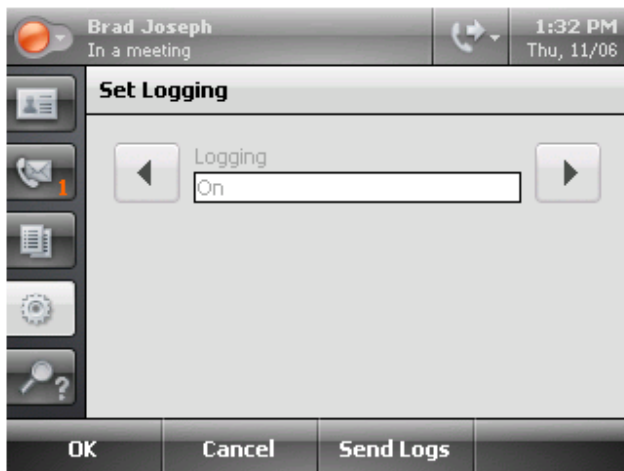
- Tap **Settings**.
- Tap **Set Logging**.



- To enable logging tap the left arrow, to disable logging tap the right arrow.

To send a log, do the following:

- Tap **Settings**.
- Tap **Set Logging**.
- Tap **Send Logs**.




└ Tap to send logs

3.6.13 Viewing the device information

The following information can be viewed from the System Information screen:

- Firmware version number
- MAC address
- IP Address
- Subnet Mask
- Gateway IP Address
- DNS Server IP Address
- VLAN ID number

To view the device information, do the following:

- Tap the Settings icon, .
- Tap **System Information**.
- To return to the previous screen, tap **OK**.



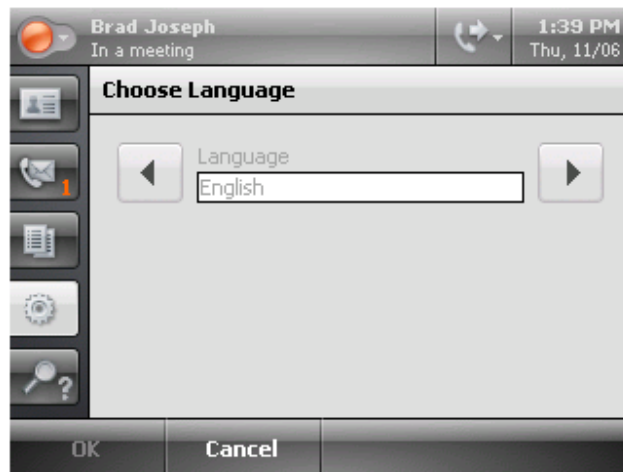
3.6.14 Changing the language

IP8540 (with S/W version 3.5.6907.0) supports multiple languages. Your administrator can configure one or more languages for your phone depending on the needs for your organization.

To change the language for all text displayed on your phone, do the following:

- Tap **Settings**.
- Tap **Change Language**.
- Tap the arrow buttons to choose a language.
- Tap **OK** to request a language.
-

The language will be requested from the server and downloaded to your device within minutes.



3.7 Connecting the USB Cable and Signing In


3.7.1 Why Use the USB Cable






You can connect IP8540 (with S/W version 3.5.6907.0) to your computer using the USB cable for simplified deskphone sign in using Office Communicator 2007 R2. Below is a list of advantages to using the USB cable.

- **Computer sign in** You can connect Office IP8540 to your computer using the USB cable for quick desk phone sign in using Office Communicator 2007 R2.
- **Make a one-click audio call** Each contact in your Office Communicator 2007 R2 Contact List has a default number that you can call by clicking the Call button to the right of the contact.
- **USB audio using IP8540** When your IP8540 is attached to your computer with a USB cable, you can receive audio through the phone's loudspeaker for Office Live Meeting 2007 and Office Communicator 2007 R2 calls.

4. Making Calls with IP8540

4.1 Adjusting the handset and speakerphone volume

The **Volume Up/Down** button  controls ringer, handset and speaker volume. What the buttons control depends on the state of the device. The volume levels that you set are retained from one meeting to the next until you change them. Table below summarizes the modes for volume settings.

State of device	Volume mode	Description
Phone is on or off hook and speakerphone button  is on.	Adjusts the speaker volume during a call	Press the volume button  and adjust the volume of the dial-tone prior to using the phone.
Phone is off hook and speakerphone button  is off.	Adjusts the handset volume during a call	Press the volume button  and adjust the volume of the dial-tone prior to using the phone.
Not in a call and phone is on or off hook	Adjusts ringer volume	Press the volume button  and adjust the volume of the ringer.

Additionally, you can adjust volume by tapping the **Settings** and **Volume** buttons available on the screen.



4.2 The Call Basics

4.2.1 Make a call, while idle

- Tap a contact in the displayed list.
- or
- Dial the number using the keypad.

To make an outgoing phone call while the device is on the hook
a) With the handset on the hook, enter the phone number using the 10-digit keypad. The numbers appear in the phone number field. Use the backspace key to correct an entry.
b) After the final digit is entered, remove the phone from the hook and the phone will begin dialing. Additionally, you can press speaker button or select the Call button.
To make an outgoing phone call while the device is off the hook
a) With the handset off the hook, enter the phone number using the 10-digit keypad. The numbers appear in the phone number field. Use the backspace key to correct an entry.
b) After the final digit is entered, press the Call button on the LCD screen. Additionally, the numbers will automatically dial if a matching dial string has been found.

- Tap **Call**.

You may lift the handset for privacy.

4.2.2 Make a call, while busy

- Tap **New Call** and
- Tap contact in the displayed list.
- or
- Dial the number using the keypad.
- Tap **Call**.

You may lift the handset for privacy.

4.2.3 Redial the most recent call

You can redial the most recent call you have dialed (with S/W version 3.5.6907.0).

- From the Contacts screen, tap **Redial**.

The most recent call you have placed will begin connecting.

4.2.4 Receive a call

- Lift the handset or press **Answer**, which activates the Speakerphone or headset.
- Or,
- Press **Redirect** to send the call to another destination.
- Or,
- Press **To Voice Mail** to send the call to Voice Mail. Voice mail service requires Exchange Server 2007.

4.2.5 Hold a call

- Tap **Hold** in the active call window.

4.2.6 Resume a held call

- Tap the call in the call list.

4.2.7 Transfer

You can transfer a call using the following methods:

- Consult with the intended contact for transferring the call and then transfer the call.
- Directly transfer the call to a contact.
- If your mobile phone number is configured to appear in Office Communicator 2007 on your PC, then you can transfer a call to your mobile phone.

To transfer a call, do the following:

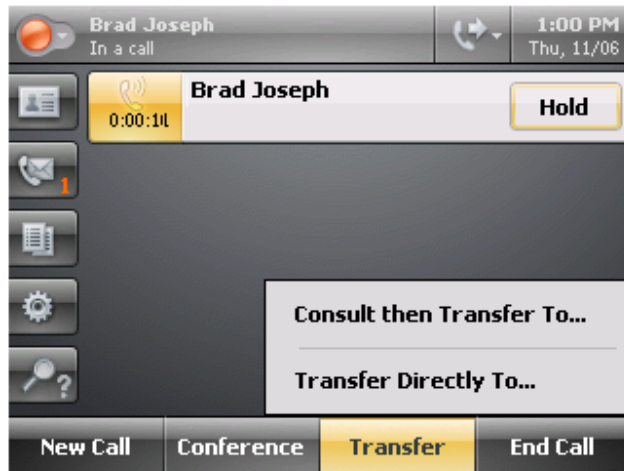
- With a call in progress, tap **Transfer**.
- Tap **Consult then Transfer To...** to contact the intended contact for transferring the call.

-or-

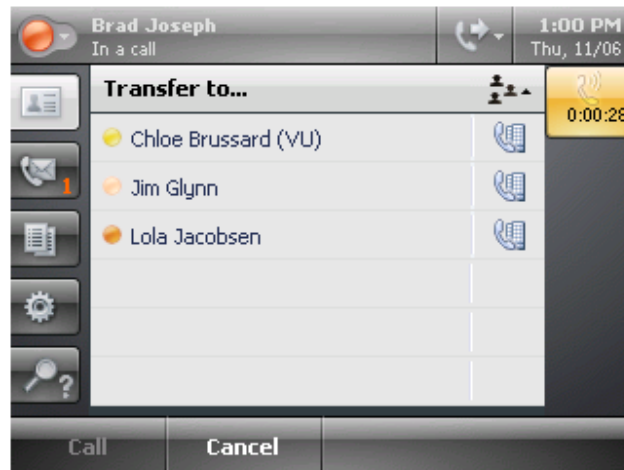
Tap **Transfer Directly To...** to transfer the call immediately to a contact.

-or-

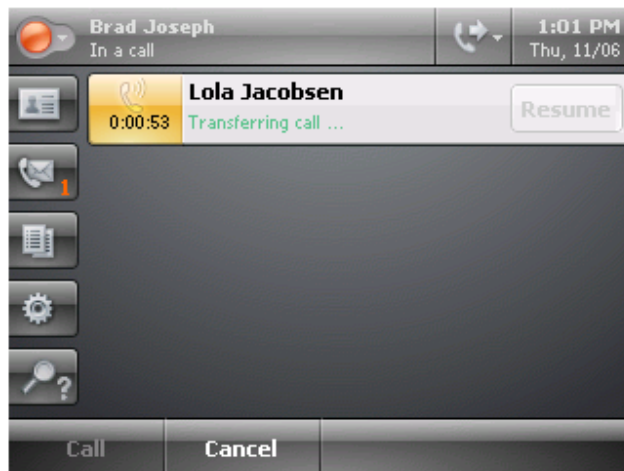
When your mobile phone is published in Office Communicator you will have the option of transferring calls to your mobile phone. Tap **Transfer to Mobile Phone...** to forward the call to your mobile phone.



- Tap a contact to transfer the call to.



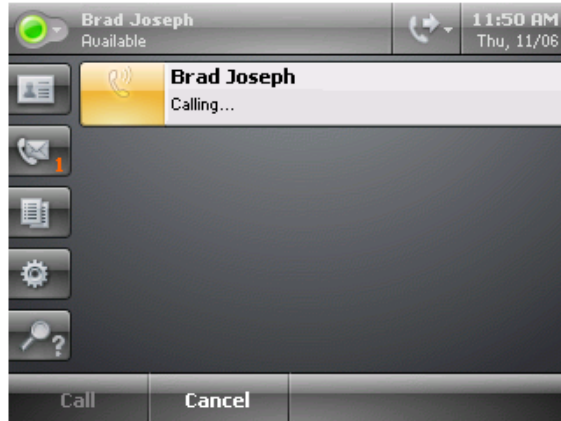
- Either consult with the contact and transfer, or in the case of a direct transfer, the call will be immediately transferred.



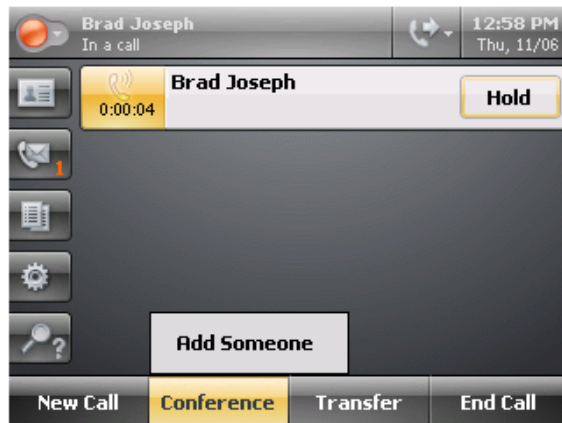
4.2.8 Conference

In the Contact List, do the following:

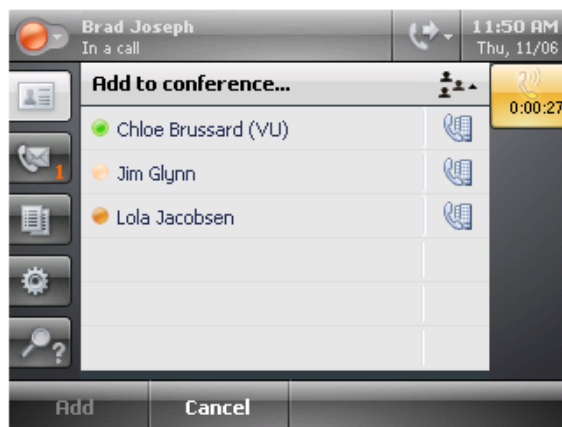
- Select a contact to call.



- After the caller answers tap **Conference** and then **Add Someone**.



- Tap another contact to call.



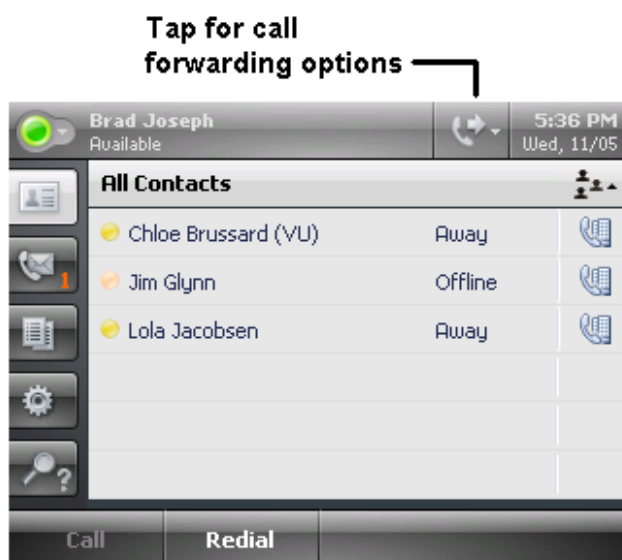
4.3 Forwarding Calls

IP8540 has the ability to send incoming calls to an alternate destination, i.e. forward your calls. You define where to send calls, voice mail, a contact or a phone number. Exchange 2007 is required for forwarding to voice mail.

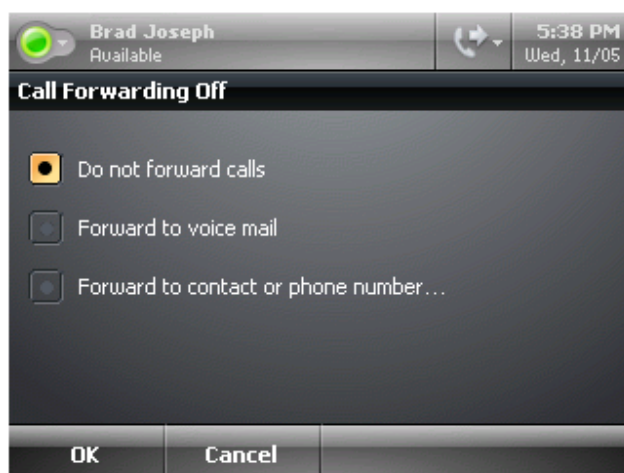
Call-forwarding parameters can be set using IP8540 or from Office Communicator 2007 R2. Configuring call-forwarding options on one results in updating the configuration on the other. For example, setting call-forwarding to go directly to voice mail from Office Communicator 2007 R2 will update for IP8540 as well.

To configure call-forwarding rules using IP8540, do the following:

- At the top of the screen, tap the forwarding icon to the right of your name.

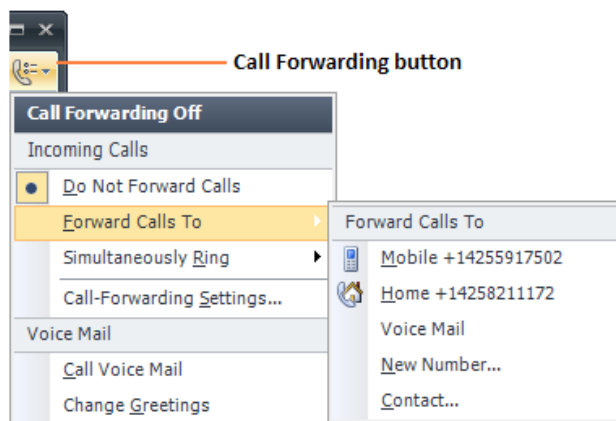



- On the **Forwarding** screen, tap the forwarding rule that you want to apply.




- If you are forwarding to another contact or phone number, select **Forward to contact or phone number...**, and tap the contact name that you want to forward your calls, and then tap **OK**.
- On the **Forwarding** screen, tap **OK**.

To configure call-forwarding rules using Office Communicator 2007 R2, do the following:



- In the **Office Communicator** window, click the **Call Forwarding** button .
- Click **Forward Calls To**, and then select one of the following:
 - **Voice mail** to automatically forward all incoming calls to your voice mail.
 - A phone number to automatically forward calls to that number.
 - **New Number** to enter a new number to which to forward the call. You can refer to the Online Help for examples of how to enter phone numbers.
 - **Contact**, and then select a contact to forward calls to that contact.

To ring another number at the same time your device rings

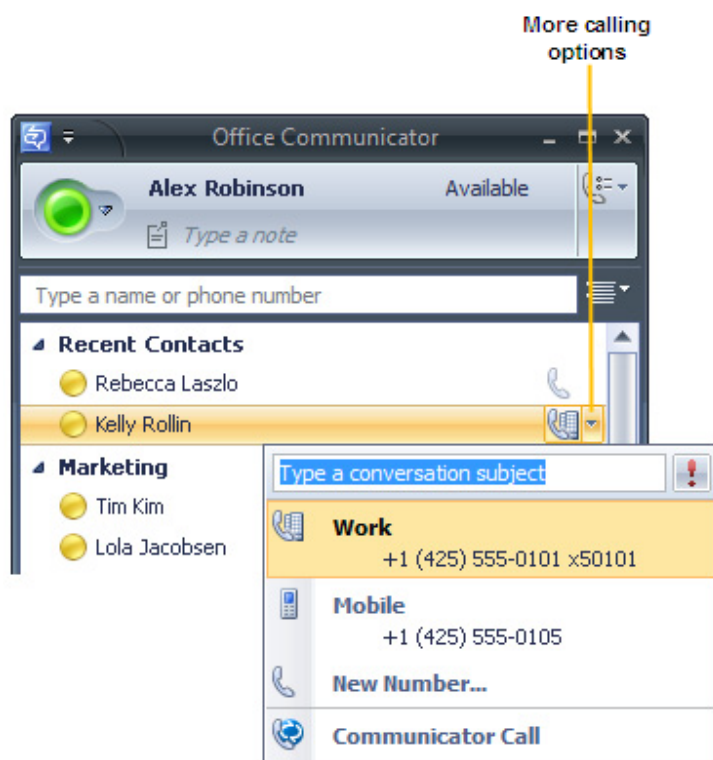
- In the **Office Communicator** window, click the Call Forwarding button , point to **Simultaneously Ring**, and then do one of the following:
 - Click a phone number to simultaneously ring your primary phone and the additional number.
 - Click **New Number** to enter a new number to which to ring at the same time as your primary number. You can refer to the Online Help for examples of how to enter phone numbers.

4.4 Make a Phone Call Using Office Communicator 2007 R2

Each contact in your Contact List has a number that you can call by clicking the **Call** button associated with the contact. The number is the contact's work number by default, but can change based on the number most recently used to call the contact. If you have the USB cable connected between your IP8540 (with S/W version 3.5.6907.0) and your computer, you can place calls directly from Office Communicator 2007 R2.

4.4.1 What is a Communicator Call?

Office Communicator 2007 R2 provides a **Communicator Call** option, as a way of placing a call to a contact. When you place a **Communicator Call**, the call is a VoIP call that is directed to all of the contact's devices that are configured for Office Communicator 2007. Depending upon the devices on which the contact has Office Communicator configured, the call can ring either the contact's computer or her telephony devices that are configured for Office Communicator, or both.



To view call options for a contact:

- In the Contact List, click the arrow to the right of the **Call** button associated with the contact.
- In the Call options menu, click the name or number you want to call or click **New Number** and then enter the number you want to call.

To make a one-click audio call

- In the Contact List, click the **Call** button to the right of the contact you want to call.

5. Troubleshooting Problems

5.1 Log-in

I cannot sign-in to IP8540. I see error "Cannot connect to server or server name is incorrect".

- Validate your domain name is correct.
- See *Unexpected Behavior* later in this section.
- Contact your IT help to:
 - ✓ Ensure DHCP is configured to provide DNS address as part of DHCP response.
 - ✓ Ensure DNS has SRV records for SIP service.
 - ✓ Ensure SIP server is reachable from LAN.

I cannot sign-in to my IP8540. I see error "Cannot validate server certificate".

- See *Unexpected Behavior* later in this section.
- Contact your IT help to:
 - ✓ Ensure either time.windows.com is accessible or NTP is configured with appropriate SRV records created in DNS.
 - ✓ Ensure PKI enrollment objects have been created on AD to point to CA or CA delegate
 - ✓ If PKI enrollment is not enabled, then ensure caAttribute for Certificate Authority container has appropriate root certificates.

I cannot sign-in to IP8540. I see error "User name or password is invalid".

- Make sure you user name and password is correct.
- If you change your password on the device before the server attempts to re-authenticate, the device will not be able to sign in to the server and will be left on the sign in screen. Enter your old password in the Password field and press **Sign in**.
- If your domain password has changed and the server attempts to re-authenticate, the device will return to the sign in screen. Enter your new password in the Password field and press **Sign in**.
- See *Unexpected Behavior* later in this section.
- Contact your IT help to:
 - ✓ Make sure time on your phone is correct if Kerberos is enabled in your system.
 - ✓ Make sure either WINS server is enabled or DHCP option 119 provides DNS suffix search list if Kerberos authentication is being used on the server.

I cannot sign-in to IP8540; I continue to see the error message "Device does not have a valid IP address".

- Ensure the IP8540 is properly connected to switch or router.
- Make sure LAN outlet has proper connectivity to your network.
- See *Unexpected Behavior* later in this section.
- Contact your IT Help and check:
 - ✓ Make sure DHCP is enabled in your system.

I mistyped my PIN during first configuration, how do I correct it?

- Double tap on the edit text box for pin and start typing new digits.
- Use the Settings Menu to edit your PIN.

I had configured my device and left for the day. This morning it is showing the login prompt.

- A software upgrade or password expiration has probably occurred. Enter your login information.
- See *Unexpected Behavior* later in this section.

I came this morning and my phone display shows "My Device" and "Recycle Bin".

- The phone software has restarted in an unusable state. Power cycle the phone.

I am trying to login for the first time and I do not see the PIN option.

- Contact your IT Help and check:
 - ✓ Ensure PIN is enabled on OCS (pool level->FrontEnd Properties->VoIP tab).

I am trying to configure fingerprint, but the phone does not seem to recognize my swipes.

- Click “Use Pin Configuration” on menu bar and click “Use finger print Configuration” on menu bar. Now, try finger swipe again.
- If on repeated tries it still does not work, see Unexpected behavior section below.

I used my fingerprint as the unlock mechanism, but on every attempt my finger swipe is not being recognized. My phone is locked and I am stuck.

- Try to do a full-length clean finger print swipe – slow and easy.
- Repeat above step few times and if it still does not recognize your finger swipe, then use small recessed button in the wiring cavity. The recess button is located between USB and headset connectors. Use a small (non-metallic) point to press the button. This will take you back to the factory defaults.

How can I restore my device to factory defaults?

- A small recessed button is located in the wiring cavity between USB and headset connectors. Use a small (non-metallic) point to press the button. This will take you back to the factory default

On device boot-up, calibration screen shows “press enter to accept”. I do not see enter on the phone.

- Use “Select” button in the center of the Scroll wheel in lieu of Enter.

My screen calibration seems off and I cannot click anything on the screen.

- Recalibrate the touch screen. Tap **Calibrate Touch Screen** in the Settings menu to recalibrate the screen.

5.2 Placing Calls

When I press the **Help** button or the Setting button there is no response.

- Contact your IT Help and check:
 - ✓ Ensure you are signed into OCS service.

As soon as I call <xyz>, it shows call as active and hold.

- In the active call display, **Hold** is a softkey. Tapping the **Hold** softkey places the connected party on hold.

Before I complete my dialing, the call is initiated with invalid number.

- See *Unexpected Behavior* later in this section.
- Contact your IT Help and check
 - ✓ Most probably dialing plan has overlapping rules causing one rule to override other. Remove overlap rules or reconfigure dial plan to remove any conflicts.

I called someone but there is no speech path.

- Tap **Hold** and then tap the call in the active call list and see if speech path is recreated.
- See *Unexpected Behavior* later in this section.
- Contact your IT Help and check:
 - ✓ Are you traversing firewall? If so, make sure MRAS has been configured correctly.

- ✓ Do you have any internal firewall? If so, make sure UDP ports on internal firewall are open for communication.

5.3 Conference Call

I am trying to add someone to a conference, but I keep seeing "Connecting" on display.

- See *Unexpected Behavior* later in this section.
- Contact your IT Help and check:
 - ✓ Make sure AV MCU's are configured in the network.
 - ✓ Make sure VoIP is enabled on AV MCU's.
 - ✓ Make sure IP8540 user is UC enabled.

5.4 Unexpected Behavior

IP8540 locked up while I was doing <xyz...>.

- Restart your device by power cycling. Notify your IT Help should this reoccur.

IP8540 is behaving inconsistently

- Power-cycle the device to restart your phone. Notify your IT Help should this reoccur.

6. IP8540 Product Specification

Item	Specification
Network interface	IEEE 802.1 10/100 Base-T Fast Ethernet, RJ-45
Desktop PC Interface	IEEE 802.1 10/100 Base-T Fast Ethernet, RJ-45
Peripheral interface	(1) USB type A port (reserved) (1) USB type B port
Indicators	Mute LED Speakerphone LED Headset LED Presence LED
VoIP protocol	Session Initiation Protocol (SIP)
Audio processing	Codec: G.722.1, G.723.1, G.726, G.711, MSRT Audio, SIREN Voice Activity Detection (VAD) Comfort Noise Generation (CNG)
User Interface elements	5.7" TFT color LCD with touch-screen Navigation wheel Functional buttons <ul style="list-style-type: none"> • Microphone mute • Speakerphone • Headset • Volume Control • Help Alphanumeric 12-button dial pad Microphone Speaker Handset Headset jack (RJ-11)
Physical Size (H x W x D)	180 x 270 x 195 mm (including handset, with 45 degree angle position)
Weight	6.6 Kg (3 lbs.) approx.
Power	IEEE 802.3af Power-over-Ethernet support (class 3) or External AC/DC adaptor: Input 100~240VAC, 0.5 A (Max.), 50/60 Hz Output 12VDC, 1.0 A (Max.) 12W Max.
Noise level	15 dB @ 1 meter
Operation Temperature	0~40 (°C) , 32~104 (°F)
Storage Temperature	-20 ~ 60 (°C) , -68~140 (°F)
Operation Humidity	10-85% RH (non-condensing)



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